

AMENDMENTS TO THE SPECIFICATION

Please replace the second full paragraph on page 5 with the following amended paragraph.

In other words, the present invention relates to a positive active material for the non-aqueous electrolyte secondary battery comprising a lithium-nickel composite oxide represented by the compositional formula $\text{Li}_a\text{Ni}_{1-b-c}\text{Co}_b\text{Mn}_c\text{O}_2$ (in which the suffix a is not greater than 1.09 ($a \leq 1.09$), the suffix b is from not smaller than 0.05 to not greater than 0.35 ($0.05 \leq b \leq 0.35$), and the suffix c is from not smaller than 0.15 to not greater than 0.35 ($0.15 \leq c \leq 0.35$), with the proviso that the sum of b and c is from not smaller than 0.25 to not greater than 0.55 ($0.25 \leq b + c \leq 0.55$)) having a hexagonal structure. When subjected to the X-ray diffractometry with the $\text{CuK}\alpha$ ray, the lithium-nickel composite oxide exhibits an intensity ratio $R [(I_{012} + I_{006})/I_{101}]$ of not greater than 0.50, wherein R is the ratio of the sum of the diffraction peak intensity I_{012} on the 012 plane and the diffraction peak intensity I_{006} on 006 plane to the diffraction peak intensity I_{101} on the 101 plane.

Please replace the first full paragraph on page 7 with the following amended paragraph.

Referring to the crystallinity of the lithium-nickel composite oxide, the data of the diffraction peak intensity on various crystalline planes obtained by X-ray diffractometry is used as an important parameter from which the crystallinity of lithium-nickel composite oxide can be presumed. In other words, the intensity ratio $R [(I_{012} + I_{006})/I_{101}]$ of the sum of the diffraction peak intensity I_{012} on the 012 plane and the diffraction peak intensity I_{006} on the 006 plane to the diffraction peak intensity I_{101} on the 101 plane observed when the lithium-nickel composite oxide is subjected to the X-ray diffractometry with the $\text{CuK}\alpha$ ray

can be used as a parameter from which the crystallinity thereof can be presumed. It is considered that the ~~more~~ smaller this intensity ratio is, the higher is the crystallinity of lithium-nickel composite oxide. In the present invention, it was found that, when R is not greater than 0.50, the resulting lithium-nickel composite oxide has a high crystallinity and thus gives an excellent cycle life performance.

Please replace the paragraph bridging pages 9-10 with the following amended paragraph.

The present invention also relates to a positive active material for the non-aqueous electrolyte secondary battery comprising a lithium-nickel composite oxide represented by the compositional formula ~~$\text{Li}_{1-a}\text{Ni}_{1-b-c-d}\text{Co}_b\text{Mn}_c\text{M}_d\text{O}_2$~~ $\text{Li}_a\text{Ni}_{1-b-c-d}\text{Co}_b\text{Mn}_c\text{M}_d\text{O}_2$ (in which M is at least one metal element selected from the group consisting of Al, Ti, W, Nb and Mo, the suffix a is not greater than 1.09 ($a \leq 1.09$), the suffix b is from not smaller than 0.05 to not greater than 0.35 ($0.05 \leq b \leq 0.35$), the suffix c is from not smaller than 0.15 to not greater than 0.35 ($0.15 \leq c \leq 0.35$), and the suffix d is from greater than 0 to not greater than 0.35 ~~($0 \leq d \leq 0.35$)~~ ($0 < d \leq 0.35$), with the proviso that the sum of b, c and d is from not smaller than 0.25 to not greater than 0.55 ($0.25 \leq b + c + d \leq 0.55$)) having a hexagonal structure. When subjected to the X-ray diffractometry with the $\text{CuK}\alpha$ ray, the lithium-nickel composite oxide exhibits an intensity ratio $R (= (I_{012} + I_{006})/I_{101})$ of not greater than 0.50, R being the ratio of the sum of the diffraction peak intensity I_{012} on the 012 plane and the diffraction peak intensity I_{006} on the 006 plane to the diffraction peak intensity I_{101} on the 101 plane.

Please replace the first full paragraph on page 10 with the following amended paragraph.

By this constitution, the crystallinity of the positive active material represented by the compositional formula $\text{Li}_a\text{Ni}_{1-b-c}\text{Co}_b\text{Mn}_c\text{M}_d\text{O}_2$ ~~$\text{Li}_a\text{Ni}_{1-b-c-d}\text{Co}_b\text{Mn}_c\text{M}_d\text{O}_2$~~ can be kept high. At the same time, the adhesivity of the positive active material to the electrically conductive material and the binder in the positive electrode compound can be kept to inhibit the increase of internal resistance, making it possible to secure the excellent capacity density and cycle life performance.

Please replace the paragraph bridging pages 13-14 with the following amended paragraph.

As the positive active material for the non-aqueous electrolyte secondary battery of the present invention, there is used a lithium-nickel composite oxide having a hexagonal structure, which is represented by the compositional formula $\text{Li}_a\text{Ni}_{1-b-c}\text{Co}_b\text{Mn}_c\text{O}_2$ or ~~$\text{Li}_a\text{Ni}_{1-b-c}\text{Co}_b\text{Mn}_c\text{M}_d\text{O}_2$~~ $\text{Li}_a\text{Ni}_{1-b-c-d}\text{Co}_b\text{Mn}_c\text{M}_d\text{O}_2$ (in which M is at least one metal element selected from the group consisting of Al, Ti, W, Nb and Mo), wherein the compositional ratio of elements and the physical properties of the positive active material are specified. The resulting non-aqueous electrolyte secondary battery exhibits almost the same capacity density as that of lithium-cobalt composite oxide, i.e., not smaller than 150 mAh/g, an excellent cycle life performance and a drastically enhanced the safety of the battery. As compared with the lithium-cobalt composite oxide, the foregoing positive active material has a small cobalt content, making it possible to provide a non-aqueous electrolyte secondary battery at a low cost.

Please replace the first full paragraph on page 14 with the following amended paragraph.

The non-aqueous electrolyte secondary battery of the invention comprises, as a positive active material, a lithium-nickel composite oxide having a hexagonal structure represented by the compositional formula $\text{Li}_a\text{Ni}_{1-b-c}\text{Co}_b\text{Mn}_c\text{O}_2$ or ~~$\text{Li}_a\text{Ni}_{1-b-c}\text{Co}_b\text{Mn}_c\text{M}_d\text{O}_2$~~ $\text{Li}_a\text{Ni}_{1-b-c-d}\text{Co}_b\text{Mn}_c\text{M}_d\text{O}_2$ (in which M is at least one metal element selected from the group consisting of Al, Ti, W, Nb and Mo), and the foregoing lithium-nickel composite oxide may be used in admixture with other positive active materials.

Please delete the present Abstract of the Disclosure and replace it with the following amended Abstract of the Disclosure (a clean copy of the amended Abstract of the Disclosure is attached to this Amendment).

A positive active material for ~~the~~ a non-aqueous electrolyte secondary battery ~~comprising~~ includes a lithium-nickel composite oxide represented by the compositional formula $\text{Li}_a\text{Ni}_{1-b-c}\text{Co}_b\text{Mn}_c\text{O}_2$ ($a \leq 1.09$, $0.05 \leq b \leq 0.35$, $0.15 \leq c \leq 0.35$, and $0.25 \leq b+c \leq 0.55$). ~~By the~~ By X-ray diffractometry with ~~the~~ a $\text{CuK}\alpha$ ray, the lithium-nickel composite oxide exhibits an intensity ratio $R ((I_{012} + I_{006})/I_{101})$ of not greater than 0.50, wherein R is the ratio of the sum of the diffraction peak intensity I_{012} on the 012 plane and the diffraction peak intensity I_{006} on the 006 plane to the diffraction peak intensity I_{101} on the 101 plane. The crystallinity of the positive active material of the compositional formula $\text{Li}_a\text{Ni}_{1-b-c}\text{Co}_b\text{Mn}_c\text{O}_2$ can be kept high and it is possible to secure ~~the~~ good capacity density and cycle life performance.